

**NO**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	BRAVO	Mexico	1999	annual
Anthropogenic	APEI	Canada	1989-2014	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Ship^1	ICODAS	Global	2002	monthly
Ship^1	EMEP	Europe	1990-2012	annual
Aircraft	AEIC	Global	2005	monthly
Biomass burning	GFED4	Global	1997-2013	monthly
Lightning	Murray et al	Global	online	online
Soil	Vinken et al	Global	online	online

^1 via PARANOx

**NO2**

Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	DICE	Africa	2013	annual
Ship^1	ICODAS	Global	2002	monthly
Ship^1	EMEP	Europe	1990-2012	annual

^1 via PARANOx

**HNO3 / O3**

Ship^1	ICODAS	Global	2002	monthly
Ship^1	EMEP	Europe	1990-2012	annual

^1 via PARANOx

**CO**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	BRAVO	Mexico	1999	annual
Anthropogenic	APEI	Canada	1989-2014	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Ship	ICODAS	Global	2002	monthly
Ship	EMEP	Europe	1990-2012	annual
Aircraft	AEIC	Global	2005	monthly
Biomass burning	GFED4	Global	1997-2013	monthly
Biogenic	MEGAN	Global	online	online

**SO2**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	BRAVO	Mexico	1999	annual
Anthropogenic	APEI	Canada	1989-2014	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Ship	ARCTAS	Global	2008	annual
Ship	EMEP	Europe	1990-2012	annual
Aircraft	AEIC	Global	2005	monthly
Biomass burning	GFED4	Global	1997-2013	monthly
Volcano	?	Global	1979-2009	daily

**SO4**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	BRAVO	Mexico	1999	annual
Anthropogenic	APEI	Canada	1989-2014	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Aircraft	AEIC	Global	2005	monthly

**NH3**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	APEI	Canada	1989-2014	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Natural	GEIA	Global	1990	monthly
Trash	Wiedinmyer et al.	Global	2008	annual
Seabirds	?	Global	1990	monthly
Biomass burning	GFED4	Global	1997-2013	monthly

**BCPI/OCPI**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	APEI	Canada	1989-2014	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly

Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Biomass burning	GFED4	Global	1997-2013	monthly
Aircraft	AEIC	Global	2005	monthly

#### BCPO/OCPO

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	APEI	Canada	1989-2014	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Biomass burning	GFED4	Global	1997-2013	monthly

#### EOH

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Decaying plants	?	Global	climatology	monthly
Biomass burning	GFED4	Global	1997-2013	monthly
Biogenic	MEGAN	Global	online	online

#### C2H6

Anthropogenic	Tzompa-Sosa et al.	Global	2010	monthly
Aircraft	AEIC	Global	2005	monthly
Biomass burning	GFED4	Global	1997-2013	monthly

#### C3H8

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	Xiao et al.	Global	1985	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Aircraft	AEIC	Global	2005	monthly
Biomass burning	GFED4	Global	1997-2013	monthly

#### C2H4

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Biomass burning	GFED4	Global	1997-2013	monthly
Biogenic	MEGAN	Global	online	online

**C2H2**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Aircraft	AEIC	Global	2005	monthly

**PRPE**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Aircraft	AEIC	Global	2005	monthly
Biomass burning	GFED4	Global	1997-2013	monthly
Biogenic	MEGAN	Global	online	online

**BENZ/TOLU/XYLE**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Biomass burning	GFED4	Global	1997-2013	monthly

**CH2O**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Aircraft	AEIC	Global	2005	monthly
Biomass burning	GFED4	Global	1997-2013	monthly

**ALD2**

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Aircraft	AEIC	Global	2005	monthly
Decaying plants	?	Global	climatology	monthly

Biomass burning	GFED4	Global	1997-2013	monthly
Biogenic	MEGAN	Global	online	online
Ocean	Johnson et al	Global	online	online

#### MEK

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual
Aircraft	AEIC	Global	2005	monthly
Biomass burning	GFED4	Global	1997-2013	monthly

#### HCOOH

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual

#### ALK4

Anthropogenic	CEDS	Global	1950-2014	monthly
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Aircraft	AEIC	Global	2005	monthly
Biomass burning	GFED4	Global	1997-2013	monthly

#### ACET

Anthropogenic	RETRO	Global	2000	monthly
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Aircraft	AEIC	Global	2005	monthly
Trash	Wiedinmyer et al.	Global	2008	annual
Biomass burning	GFED4	Global	1997-2013	monthly
Biogenic	MEGAN	Global	online	online
Ocean	Johnson et al	Global	online	online

#### SOAP

Anthropogenic	Yevich and Logan	Global	1985	annual
Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	BRAVO	Mexico	1999	annual

Anthropogenic	APEI	Canada	1989-2014	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Ship	ICOADS	Global	2002	monthly
Ship	EMEP	Europe	1990-2012	annual
Aircraft	AEIC	Global	2005	monthly
Trash	Wiedinmyer et al.	Global	2008	annual
Biomass burning	GFED4	Global	1997-2013	monthly
Biogenic	MEGAN	Global	online	online

#### **SOAS / MTPO / LIMO / SESQ**

Biogenic	MEGAN	Global	online	online
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#### **MTPA**

Biomass burning	GFED4	Global	1997-2013	monthly
Biogenic	MEGAN	Global	online	online

#### **POG1 / POG2**

Anthropogenic	Bond	Global	2000	monthly
Anthropogenic	APEI	Canada	1989-2014	annual
Biomass burning	GFED4	Global	1997-2013	monthly

#### **NAP**

Anthropogenic	Yevich and Logan	Global	1985	annual
Biomass burning	GFED4	Global	1997-2013	monthly

#### **HAC / GLYC**

Anthropogenic	Yevich and Logan	Global	1985	annual
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual

#### **MGLY / GLYX**

Anthropogenic	Yevich and Logan	Global	1985	annual
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#### **pFe**

Anthropogenic	EMEP	Europe	1990-2012	annual
Anthropogenic	BRAVO	Mexico	1999	annual
Anthropogenic	APEI	Canada	1989-2014	annual
Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	MIX	Asia	2008-2010	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual

**MOH**

Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	DICE	Africa	2013	annual
Trash	Wiedinmyer et al.	Global	2008	annual

**HNO2**

Anthropogenic	NEI2011	USA	2006-2013	monthly
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**RCHO / MACR**

Anthropogenic	NEI2011	USA	2006-2013	monthly
Anthropogenic	DICE	Africa	2013	annual
Aircraft	AEIC	Global	2005	monthly

**DMS**

Ocean	Johnson et al	Global	online	online
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**DST1 / DST2 / DST3 / DST4**

Dust	DEAD	Global	online	online
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**SALA / SALC / Br2 / BrSALA / BrSALC**

Sea salt	Jaegle et al, Sherwer	Global	online	online
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**HOI / I2**

Oceanic	Carpenter et al	Global	online	online
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**CHBr3 / CH2Br2**

Oceanic	Qing Liang	Global	2000	annual
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**CH3I / CH2I2 / CH2ICl / CH2IBr**

Oceanic	Carlos Ordonez	Global	2000	monthly
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